Appl. No. 10/586,730 Amendment dated March 16, 2012 Reply to Final Office Action of October 21, 2011

## **Amendments to the Claims:**

This listing of claims will replace all prior versions and listing of claims in the application.

## **Listing of Claims:**

(currently amended) A microorganism separation device, comprising:
a sample solution reservoir that stores a sample solution containing
microorganisms therein;

sample solution supply means a pump for supplying the sample solution stored within the sample solution reservoir to a first flow path;

a microorganism sensor that is capable of detecting a monadelphous microorganism in the sample solution that passes through the first flow path;

sample solution separating means a vibrator for stopping to supply the sample solution to the first flow path and discharging the detected microorganism together with the sample solution from a termination side of the first flow path in a state where the supply of the sample solution to the first flow path is stopped on the basis of a detection result of the microorganism by the microorganism sensor; and

an acceptor that receives the sample solution that is discharged from the termination side of the first flow path,

wherein the acceptor comprises a plurality of acceptors, and the positional relations between a sample solution discharge portion at the termination of the first flow path and the respective acceptors are relatively movable.

- 2. (currently amended) The microorganism separation device according to claim
- 1, which further comprises a controller configured to control the sample solution separating means vibrator so that the sample solution that is discharged from the termination side of the first flow path includes only one microorganism.
- 3. (currently amended) The microorganism separation device according to claim 1, wherein the termination of the first flow path is coupled with the middle of a second flow path, the microorganism sensor detects that the microorganisms in the sample solution flow into the second flow path from a termination side of the first flow path, a carrier solution supply means second pump is provided for supplying a carrier solution which circulates and carries the sample solution that is discharged from the termination side of the first flow path, the driving of the second pump is controlled according to the signal of the microorganisms, and the acceptors are disposed on a termination side of the second flow path.
- 4. (previously presented) The microorganism separation device according to claim
- 1, wherein a filter is disposed in the sample solution supply means.

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5. (canceled)

6. (previously presented). The microorganism separation device according to claim

3, wherein a downstream side of the second flow path is divided into a plurality of

diverging pipes, and the acceptors are disposed downstream of the respective

diverging pipes.

7-10. (canceled)

11. (previously presented) The microorganism separation device according to claim

1, wherein a sensor that measures a pressure or a flow rate is disposed in the first

flow path.

12. (previously presented) The microorganism separation device according to claim

1, wherein a power supply that applies a power to the sensor is AC.

13. (new) The microorganism separation device according to claim 2, wherein the

termination of the first flow path is coupled with the middle of a second flow path, the

microorganism sensor detects that the microorganisms in the sample solution flow

into the second flow path from a termination side of the first flow path, a second

pump is provided for supplying a carrier solution, the driving of the second pump is

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controlled according to the signal of the microorganisms, and the acceptors are disposed on a termination side of the second flow path.